

AMENDMENTS TO THE DRAWINGS

Replacement sheets containing Figures 5A, 5B, 9, 10, and 11 are submitted herewith. Figure 5A has been amended to add reference numeral 56F. Figure 5B has been amended to replace reference numeral 312 on the left side of the figure with reference numeral 310. Figure 9 has been amended to delete reference numeral 512A. Figure 10 has been amended to delete reference numeral 631. Figure 11 has been amended to add the reference numerals 700, 704, 706, and 712.

REMARKS

In the Office Action dated July 21, 2004, the drawings and specification were objected to; and claims 1-6 were rejected under 35 U.S.C. § 102 over U.S. Patent No. 4,619,333 (George).

OBJECTIONS TO THE DRAWINGS AND SPECIFICATION

The drawings and specification have been amended to address the objections raised in the Office Action. Withdrawal of the objections is respectfully requested.

REJECTION UNDER 35 U.S.C. § 102

Claim 1 has been amended to recite subject matter of previous claim 4 (now cancelled). The scope of claim 1 is identical to the scope of claim 4.

Claim 1 recites a method that comprises running a perforating gun into a wellbore on a string having an isolation valve above the perforating gun, closing the isolation valve, perforating the well with the isolation valve closed so that the formation is isolated from the well surface, providing a chamber *underneath* the isolation valve, opening the chamber prior to perforating to create an underbalance condition in a region of the wellbore below the isolation valve, providing an underbalance pressure *above* the isolation valve, and, after perforating, opening the isolation valve to surge the formation. Thus, according to claim 1, there is a chamber that is provided *underneath* the isolation valve, where the chamber is opened prior to perforating to create an underbalance condition in a region of the wellbore below the isolation valve. In addition, claim 1 recites providing underbalance pressure *above* the isolation valve, with the isolation valve opened to surge the formation.

George does not disclose the chamber that is provided underneath the isolation valve. As explained by George, a lower gun 60 (see Figure 7 of George) is actuated to perforate a formation 250 in an overbalance condition. George, 9:61-64, 10:14-16. Recognizing that it is desirable to form perforations in a formation in an underbalance condition, George also describes that the hydrostatic head in tubing string 22 above a vent assembly 244 is reduced to a pressure less than the formation pressure to obtain a desirable underbalance condition prior to detonation of an upper gun 50. George, 10:21-26. Actuating the upper gun 50 with the hydrostatic head and tubing string 22 above the vent assembly 244 at a low pressure allows back surging of perforations. George, 10:45-56. In George, the underbalance condition is created by opening up communication between the formation to be perforated and a low pressure inside a tubing string *above* an isolation valve in the form of the vent assembly 244 in George. In contrast, claim 1 recites that opening of a chamber *underneath the isolation valve* is performed to create an underbalance condition. There is no opening of such a chamber underneath the vent assembly 244 disclosed by George. Therefore, it is respectfully submitted that claim 1 is not anticipated by George.

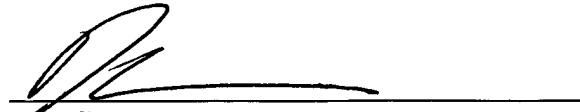
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Dependent claims are allowable for at least the same reasons. In view of the foregoing, it is respectfully submitted that all claims are now condition for allowance, which action is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 20-1504 (SHL.0141D2US).

Respectfully submitted,

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